UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/510,424	04/04/2005	Dominique Sebille	17170/002001	8851	
22511 OSHA LIANG	7590 06/15/2007 I. I. P		EXAMINER		
1221 MCKINN		BOATENG, ALEXIS ASIEDUA			
SUITE 2800 HOUSTON, TX	K 77010	·	ART UNIT	PAPER NUMBER	
,			2838		
	,				
			MAIL DATE	DELIVERY MODE	
			06/15/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Cummon.		Application No.		Applicant(s)					
		10/510,424	`	SEBILLE, DOMINIQUE					
Office Action Su	Examiner		Art Unit						
		Alexis Boateng		2838					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply									
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).									
Status	•								
 Responsive to communication(s) filed on <u>23 April 2007</u>. This action is FINAL. 2b) ☐ This action is non-final. Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i>, 1935 C.D. 11, 453 O.G. 213. 									
Disposition of Claims									
4) Claim(s) 1-10 is/are per 4a) Of the above claim(s) 5) Claim(s) is/are a 6) Claim(s) 1-10 is/are rejection 7) Claim(s) is/are of 8) Claim(s) are sub Application Papers 9) The specification is objection 10) The drawing(s) filed on	is/are withdraw llowed. ected. bjected to. eject to restriction and/or ected to by the Examine is/are: a) acce	vn from considerati r election requirem r. epted or b)□ objec	ent. cted to by the E						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.									
Priority under 35 U.S.C. § 119	•								
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.									
Attachment(s) 1) Notice of References Cited (PTO-8 2) Notice of Draftsperson's Patent Dra 3) Information Disclosure Statement(s Paper No(s)/Mail Date	awing Review (PTO-948)	5) <u>P</u> N	terview Summary (aper No(s)/Mail Da otice of Informal Pa ther:	te					

DETAILED ACTION

This action replaces the previous final rejection action dated 1/23/07. This application acts upon claims 1- 10 of the current application.

Priority

 Acknowledgment is made of applicant's claim for foreign priority under 35
 U.S.C. 119(a)-(d). The translation of the foreign priority documents overcomes the DE-10213105 reference used in regards to claims 1- 10 in the previous action.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Gale (U.S. 6,420,793).

Regarding claims 1 and 8, Gale discloses in figures 1-4 an arrangement for carrying out a method for controlling a multi-phased and reversible rotating electrical machine, associated with a heat engine of a vehicle, specifically, an automobile, including a network for supplying electrical energy and a battery serving as a source of electrical energy connected to this network, as well as a command and control unit for the said electrical machine, in which overexcitation of the machine for a predetermined period of time causes the production of energy, and makes this energy available for the execution of certain functions

Art Unit: 2838

associated with the vehicle, characterized in that it includes a device for supplying the energy produced during the predetermined period of time of overexcitation of the machine; in that the device for supplying the energy is an energy storage device 34 that can be connected to the rotating electrical machine 10 by means of a switching device 2-2 in that it-includes a DC/DC device 14 which device is mounted between the energy supply battery/18 and the energy storage device 34 via a switching device 36 in that it includes a circuit 31 that can directly connect the rotating electrical machine 10 to the battery/18 and in that switch 36 is provided in the above-mentioned circuit 14 [see abstract; column 2, lines 63-67; column 3, lines 1-19]. With regard to the limitation "predetermined period of time": it is an inherent function of the controller, which includes a CPU, to continuously monitor and time the functions of the starter/alternator, and MPEP 2100 states that the disclosure of a limitation may be expressed, implicit or inherent.

Page 3

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 2838

4. Claims 2 – 5, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over anticipated by Gale (U.S. 6,420,793) in view of Nomura (U.S. 5,446,365).

Regarding claims 2 – 5, 9 and 10, Gale does not disclose wherein a switch comprises a MOSFET. Nomura disclose in figure 2 and at column 4 lines 4 – 6 wherein a MOSFET is disclosed. At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify the Gale system with the Nomura system so that the speed of response is increased since it has been held to be a matter of obvious design choice and within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use of the invention. See In re Leshin, 125 USPQ 416. In re Aller, 105 USPQ 233 (CCPA 1955), In re Boesch, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980).

5. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gale (U.S. 6,420,793) in view of JP-10184506.

Regarding claims 6 and 7, Gale does not disclose wherein the switching device comprises a diode with a switch mounted in series with the diode. JP-10184506 discloses in figures 1-5 and in the abstract a diode 16 in series with switch 20 connecting a capacitor 14 with an alternator 18. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the Gale apparatus and provide a diode in series with a switch, as disclosed by 3P-10184506, in order to prevent backflow. As to claim 7, Gale

Art Unit: 2838

and JP-10184506 do not disclose the use of an electromagnetic relay.

[0076]:

The instant specification only mentions the limitation "an electromagnetic relay" at paragraph [0076]. "If the applicant has not demonstrated the criticality of a specific limitation, it would be appropriate to rely solely on case law as the rationale to support an obviousness rejection". See MPEP 2144.04. Therefore, the use of an electromagnetic relay, absent any criticality, is only considered to be the use of "optimum" or "preferred" material that a person having ordinary skill in the art at the time the invention was made using routine experimentation would have found Obvious to provide for the switch disclosed by Gale and JP-10184506 in order to improve the speed of response to commands since it has been held to be a matter of obvious design choice and within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use of the invention. See In re Leshin, 125 USPQ 416. In re Aller, 105 USPQ 233 (CCPA 1955), In re Boesch, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980).

Response to Arguments

6. Applicant's arguments with respect to claim 1- 10 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 2838

7. Applicant's arguments filed 8/07/06 have been fully considered but they are not persuasive. Regarding claims 1 and 8, the applicant argues wherein the Gale reference does not disclose wherein the energy storage device is connected to starter/alternator during a predetermined period of time of overexcitation of the starter/alternator. The device for supplying the energy is an energy storage device 34 that can be connected to the rotating electrical machine 10 by means of a switching device 2-2 in that it-includes a DC/DC device 14 which device is mounted between the energy supply battery/18 and the energy storage device 34 via a switching device 36 in that it includes a circuit 31 that can directly connect the rotating electrical machine 10 to the battery/18 and in that switch 36 is provided in the above-mentioned circuit 14 [see abstract; column 2, lines 63-67; column 3, lines 1-19]. With regard to the limitation "predetermined period of time": it is an inherent function of the controller, which includes a CPU, to continuously monitor and time the functions of the starter/alternator, and MPEP 2100 states that the disclosure of a limitation may be expressed, implicit or inherent.

Page 6

Conclusion

2. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

Art Unit: 2838

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexis Boateng whose telephone number is (571) 272-5979. The examiner can normally be reached on 8:30 am - 6:00 pm, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Karl Easthom can be reached on (571) 272-1989. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2838

Page 8

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AB

SUPERVISORY PATENT EXAMINER